

Patent claims

1. Composition comprising at least the two components Z1 and Z2, the
5 composition comprising,
 - c) as component Z1, at least one polyaddition product or at least one polycondensation product having on average 2 aziridino groups or more and a molecular weight of at least 1000 and,
 - 10 b) as component Z2, at least one compound having 1 aziridino group, at least one compound according to component Z2 differing, in its chemical make-up, from at least one compound according to component Z1 in at least one further feature other than the number of the aziridino groups.
- 15 2. Composition according to claim 1, characterised in that it comprises, as component Z1, at least one polymer selected from the group consisting of polyethers, polyesters, polyurethanes and polydimethylsiloxanes.
- 20 3. Composition according to claim 1 or 2, characterised in that it comprises, as component Z1, a polyether having at least a proportion of tetrahydrofuran units.
4. Composition according to one of claims 1 to 3, characterised in that it
25 comprises, as component Z2, a compound selected from the group consisting of polyethers, polyesters, polyurethanes and polydimethylsiloxanes.
5. Composition according to one of claims 1 to 4, characterised in that
30 component Z2 differs from component Z1 in one or two or more of the following further features:
 - i) number average of the molecular weight,

- ii) weight average of the molecular weight,
- iii) polydispersity,
- iv) composition of the polymer backbone,
- v) end groups.

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6. Composition according to one of claims 1 to 5, characterised in that it comprises, as component Z2, a compound having a molecular weight of 300 or more.

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7. Composition according to one of claims 1 to 6, characterised in that it comprises an additive or a mixture of two or more additives.

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8. Process for the preparation of a composition according to one of claims 1 to 7, wherein two components Z1 and Z2 are mixed together, there being used,

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- a) as component Z1, at least one polyaddition product or at least one polycondensation product having on average 2 aziridino groups or more and a molecular weight of at least 1000 and,
- b) as component Z2, at least one compound having 1 aziridino group, and

at least one compound according to component Z2 differing, in its chemical make-up, from at least one compound according to component Z1 in at least one further feature other than the number of the aziridino groups.

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9. Dental material comprising at least one basic component B and at least one catalyst component K, basic component B comprising at least one composition according to one of claims 1 to 7 and catalyst component K comprising at least one catalyst for the cross-linking of at least part of basic component B.

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10. Dental material according to claim 9, characterised in that it has after mixing of basic component B and catalyst component K at room

temperature, within a period of 20 minutes or less, a Shore A hardness of at least 80 % of the value of Shore A hardness reached after 24 hours.

11. Use of a composition according to one of claims 1 to 7 as basic component B for coatings, impression materials, seals or dental moulding materials.

12. Use of a compound having 1 aziridino group in accelerating the setting rate of dental materials according to one of claims 9 and 10.

13. Kit for producing dental materials, comprising at least one composition according to one of claims 1 to 7 as basic component B and at least one catalyst component K comprising a catalyst for the cross-linking of at least part of basic component B, the components B and K being present separated from one another.

14. Containers and mixing devices containing a dental material according to claim 9 or 10.